

CERCOSPORA LEAF MOLD OF TOMATO IN FLORIDA

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Tomato, *Lycopersicon esculentum* Mill., is native to the Andes region of South America, where it was first used as a food by the Indians. It was introduced into western Europe in the early 16th Century. Tomatoes became popular in the United States shortly after the Civil War, and are now extensively produced throughout the United States and grown the world over (2). It is without a doubt the most popular vegetable garden plant. Presently there are innumerable varieties and types, varying in size, shape, color, solids, and flavor. The tomato is also one of the best sources of vitamins A and C. Florida ranks second to California in United States production of fresh tomatoes.

Leaf mold of tomato is caused by the fungus *Cercospora fuligena* Roldan (8). It was first noted on leaves of 'Tip Top' tomato grown near Tampa in 1970 and observed again in 1971 on field-grown cultivars of 'Walter' and 'Florida MH-1' in Collier County. These are the first reports of the disease in the United States (1).

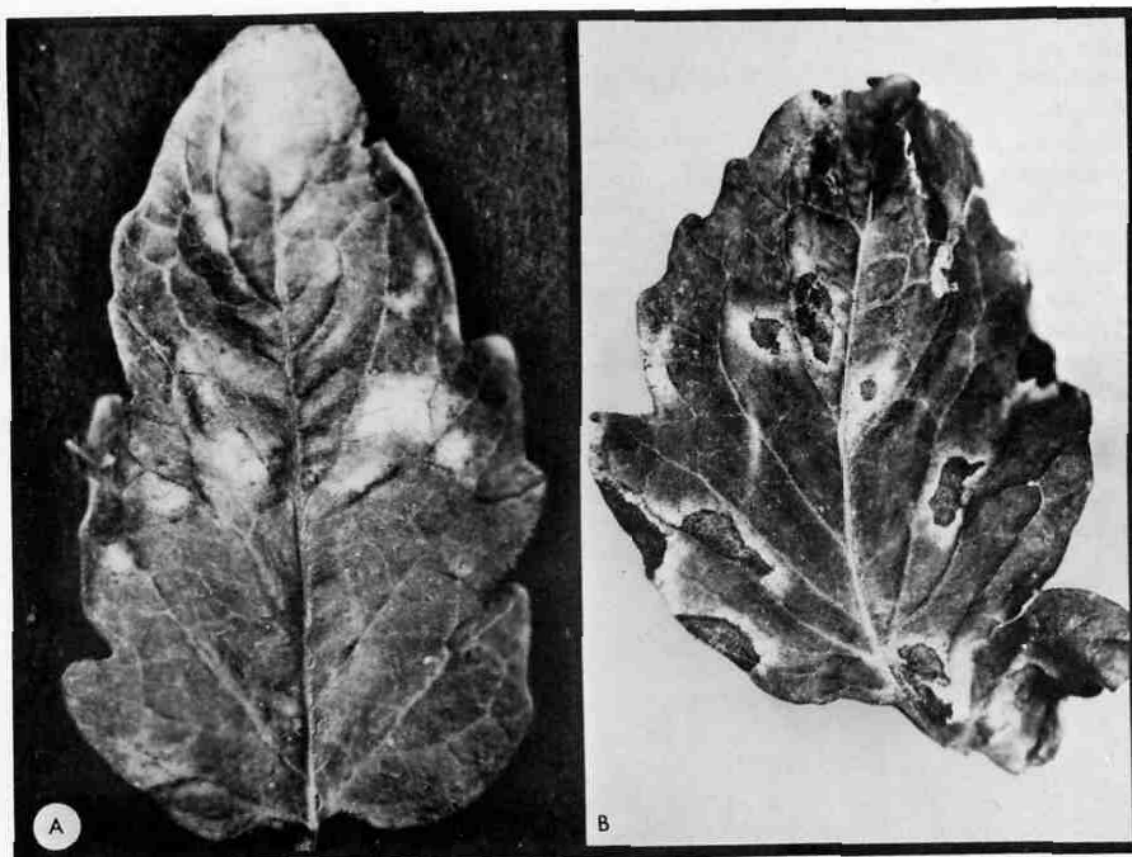


Fig. 1. *Cercospora* leaf mold of tomato: A) early symptoms showing indistinct leaf discoloration; B) advanced symptoms of necrotic leaf spot.

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SYMPTOMS. The most unusual and characteristic symptom of *Cercospora* leaf mold is the presence of indistinct leaf discoloration which is in contrast to the clearly defined leaf spots of tomato (3,4,5,6,7,9,10). No definite margin of the lesion on the upper or lower leaf surface is evident (fig. 1). With advanced symptoms the indistinct lesions coalesce and an indefinite discolored halo surrounds the necrotic leaf tissue on both leaf surfaces. Conidial (spore) production occurs mostly on the lower surface of infected leaves.

CONTROL. No control measures have been developed, but pathogenicity tests conducted with various tomato cultivars have shown that 'Homestead', and 'Floradel' are resistant to this *Cercospora*. On the other hand, *Cercospora* leaf mold may become an important economic disease problem with continued use of the susceptible cultivars 'Walter' and 'Florida MH-1'.

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